



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/524,405	02/11/2005	Mark Thomas Johnson	NL 020743	4843

24737 7590 11/14/2006

PHILIPS INTELLECTUAL PROPERTY & STANDARDS  
P.O. BOX 3001  
BRIARCLIFF MANOR, NY 10510

EXAMINER

HASAN, MOHAMMED A

ART UNIT PAPER NUMBER

2873

DATE MAILED: 11/14/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	Application No. 10/524,405	Applicant(s) JOHNSON, MARK THOMAS	
	Examiner Mohammed Hasan	Art Unit 2873	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 06 September 2006.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-11 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-11 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 02 November 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |                                                                                                            |                                                                                         |
|------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                                | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                       | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____                                                |

## DETAILED ACTION

### *Double Patenting*

1. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

2. Claims 1- 9 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-9 of copending Application No. 10/524,404. Although the conflicting claims are not identical, they are not patentably distinct from each other because.

Claims 1 and 7 are rejected under the judicially created doctrine of obviousness type double as being unpatentable over claims 1 and 7 copending application No. 10/524,404. . Although the conflicting claims are not identical, they are not patentably distinct from each other because the claims of the instant application addressed a display device comprising a plurality of independently addressable pixels, pixel

Art Unit: 2873

comprise a first and second substrate, a polyelectrochromic material disposed between substrate, voltage applied to each electrode for producing non-uniform electric fields in the polyelectrochromic material in each pixel for causing partial switching of polyelectrochromic material from a first color state to a second color for generating an area ratio defined pixel color state and the claims of the copending application 10/524,404 addressed a display device comprising a plurality of independently addressable pixels, pixel comprise a first and second substrate, a polyelectrochromic material disposed between substrate, voltage applied to each electrode for producing non-uniform electric fields in each pixel for causing partial switching of polyelectrochromic material from a first color state to a second color for generating an area ratio defined pixel color state.

It would have been obvious claims 1 and 7 copending application 10/524,404 will meet the limitations of claims of copending application 10/524,405, since both display device use a plurality of independently addressable pixel, a polyelectrochromic material disposed between the substrates and voltage applied each electrode.

Regarding claim 3, Johnson discloses claimed limitations in claim 3.

Regarding claim 4, Johnson discloses claimed limitations in claim 4.

Regarding claim 5, Johnson discloses claimed limitations in claim 5.

Regarding claim 6, Johnson discloses claimed limitations in claim 6.

3. Claims 10 and 11 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 10 and 11 of

Art Unit: 2873

compending Application No. 10/524,404. Although the conflicting claims are not identical, they are not patentably distinct from each other because.

Claims 10 and 11 are rejected under the judicially created doctrine of obviousness type double as being unpatentable over claims 10 and 11 compending application No. 10/ 524,404. . Although the conflicting claims are not identical, they are not patentably distinct from each other because the claims of the instant application addressed a computer program product directly loaded into the internal memory of a digital computer comprising software code performing the following steps at least two independently controlled electrode of an independent addressable pixel of an electrochromic display device and control voltage applied to each respective electrode for producing non-uniform electric fields in the polyelectrochromic material in each pixel and the claims of the compending application 10/524,404 addressed a computer program product directly loaded into the internal memory of a digital computer comprising software code performing the following steps at least two independently controlled electrode of an independent addressable pixel of an electrochromic display device and control voltage applied to each respective electrode for producing non-uniform electric fields in the polyelectrochromic material in each pixel.

It would have been obvious claims 10 and 11 compending application 10/524,404 will meet the limitations of claims of compending application 10/524,405, since a computer program use in a display device and display device used polyelectrochromical in each pixel, control voltage applied in each pixel.

***Claim Rejections - 35 USC § 101***

4. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claims 10 and 11 are rejected under 35 U.S.C. 101 the claimed invention is desired to non-statutory subject matter. To be statutory, the computer program needs to be embodied on a computer readable medium encoded with functional descriptive material that can function with a computer to effect a useful, concrete and tangible result.

***Claim Rejections - 35 USC § 103***

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kovacs et al (4,916,470).

Regarding claim 1, Kovacs et al discloses (refer to figure 4) a display device having a plurality of independently addressable pixels, wherein pixels comprise: a first substrate (31), a second substrate (33), the first substrate (31) and the second substrate (33), at least two independent electrodes (35) and (37) associated with first substrate (31), an independent counter-electrode (39) associated with second substrate

Art Unit: 2873

(33) , wherein each respective electrode is connected to an independently controllable voltage source (36), display device having means for controlling the voltage applied to each respective electrode for producing non-uniform electric fields in each pixel (column 12, lines 46-59, column 12, lines 63-67). However, Kovacs discloses all of the claimed limitations except a polyelectrochromic material and switching the polyelectrochromic material from a first color state to a second color state for generating an area ratio defined pixel color state. However, Kovacs discloses, an electrochromic material such as a transition metal complex, a phthalocanine, an anthraquinone or any other suitable material (column 12, lines 55-57) and Kovacs further discloses thin film 41 posses a red color and filters out light from all portions of the visible spectrum except for red light, which is permitted to pass through the film, shown by arrows 42 and white light selectively filtered by thin film 41 (column 13, lines 6-15).

It would have been obvious to one ordinary skill in the art at the time the invention was made to provide an electrochromic material such as a transition material or any other suitable material and thin film in a display device for the purpose of the production of electrographic images as taught by Kovacs (column 6, lines 23-25).

Regarding claim 2, Kovacs discloses, wherein display device further has means for controlling the time during which voltage (36) is applied to each respective electrode column 12, lines 65-67).

Regarding claim 3, Kovacs discloses (refer to figure 4) wherein display device further has means for controlling the voltage (36) applied to each respective electrode

Art Unit: 2873

35 and 37) of the pixel when in the second color state to cause a reset from the second color state to the first color state (column 12, lines 63-68, column 13, lines 1-22).

Regarding claim 4, Kovacs discloses, wherein display device further has memory storage for storing a previously generated color state (column 13, lines 6-22).

Regarding claim 5, Kovacs discloses, wherein display device further has means for comparing a color state to be achieved with a previously generated color state (column 13, lines 6-22).

Regarding claim 6, Kovacs discloses, wherein display device further has means for determining the required potential to be applied to each respective electrode in order to reach a desired color state (column 13, lines 6-22).

Regarding claim 7, Kovacs et al discloses (refer to figure 4) a method for generating analog color state in a pixel display device: a first substrate (31), a second substrate (33), the first substrate (31) and the second substrate (33), at least two independent electrodes (35) and (37) associated with first substrate (31), an independent counter-electrode (39) associated with second substrate (33), wherein each respective electrode is connected to an independently controllable voltage source (36), means for controlling the voltage applied to each respective electrode for producing non-uniform electric fields in each pixel (column 12, lines 46-59, column 12, lines 63-67). However, Kovacs discloses all of the claimed limitations except a polyelectrochromic material and switching the polyelectrochromic material from a first color state to a second color state for generating an area ratio defined pixel color state. However, Kovacs discloses, an electrochromic material such as a transition metal



Art Unit: 2873

complex, a phthalocanine, an anthraquinone or any other suitable material (column 12, lines 55-57) and Kovacs further discloses thin film 41 possesses a red color and filters out light from all portions of the visible spectrum except for red light, which is permitted to pass through the film, shown by arrows 42 and white light selectively filtered by thin film 41 (column 13, lines 6-15).

Regarding claim 8, Kovacs discloses, wherein display device further has means for controlling the time during which voltage (36) is applied to each respective electrode (column 12, lines 65-67).

Regarding claim 9, Kovacs discloses, further comprising the steps of: providing memory storage for storing a previously generated color state, providing means for comparing a color state to be achieved with a previously generated color state, means for determining the required potential to be applied to each respective electrode in order to reach a desired color state (column 13, lines 6-22).

### ***Response to Arguments***

6. Applicant's arguments with respect to claims 1-11 have been considered but are moot in view of the new ground(s) of rejection.

### ***Conclusion***

7. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP

Art Unit: 2873

§ 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Mohammed Hasan whose telephone number is (571) 272-2331. The examiner can normally be reached on M-TH, 7:00 AM to 5:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ricky L Mack can be reached on (571) 272- 2333. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 2873

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

MH  
October 2, 2006



RICKY MACK  
SUPERVISORY PATENT EXAMINER